

west virginia department of environmental protection

Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone (304) 926-0475 • FAX: (304) 926-0479

Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:

R13-1506D

Plant ID No.:

031-000005

Applicant:

Pilgrim's Pride Corporation (Pilgrim's)

Facility Name:

Moorefield Feed Mill, Hatchery and Truck Shop Complex Physical Address: Rt. 220 South, Industrial Park Road

Location:

Mailing Address:

P.O. Box 539

Moorefield, WV 26836

NAICS Code:

Feed Mill – 311119 Other Animal Food Manufacturing

Hatchery -112340

Poultry Hatcheries

Truck Shop - 484220

Specialized Freight (except Used

Goods) Trucking, Local

Application Type:

Modification

Received Date:

January 18, 2017

Engineer Assigned:

John Legg

Fee Amount

Modification -

\$1,000.00

paid January 18, 2017

NSPS -

\$1,000.00

paid January 19, 2017

NESHAP -

\$2,500.00

paid February 24, 2017

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

Moorefield Feed Mill, Hatchery and Truck Shop Complex

Date Received:

Multiple dates. See Fee Amount above.

Complete Date:

February 24, 2017 (\$2,500.00 NESHAP fee paid)

(Note: NESHAP fee was refunded because DAQ did/not

take delegation of 40 CFR 63, Subpart 7D.)/

Due Date:

May 24, 2017

Applicant Ad Date:

January 18, 2017

Newspaper:

The Moorefield Examiner

UTM's:

Easting (KM): 674.450 Northing (KM): 4,323.615 Zone: 17

Description:

Pilgrim prefers a single air permit. To achieve this goal, sources located at Pilgrim's Hatchery and Truck Shop will be added to the company's current Poultry Feed Mill permit. The only new construction associated with this application is a new 1,000 KW emergency generator engine to be located at the Hatchery. Several items found during a recent internal Pilgrim's audit will be corrected/added in the updated permit.

Summary

As part of this permitting action, undocumented emission sources at the Hatchery and Truck Shop will be incorporated into the existing Feed Mill Permit. The Feed Mill, Hatchery and Truck Shop are located on a contiguous tract of land.

This application is to install a new 1,490 BHP (10.43 mm Btu/hr) Emergency Generator at the Hatchery and to address the following items which were identified during an internal Pilgrim's review of facility operations:

- Add or update the permit on the following Feed Mill sources:
 - The Main Ingredient Receiving Distribution System (2CS) and its associated baghouse (2C) are unpermitted/undocumented in the current permit.
 - The current permit only lists one baghouse (4C) and one emission point (4E) for the Pneumatic Receiving Systems (Truck Unloading) (4S). Instead there are two (2) baghouses (4C1 and 4C2) and two (2) exterior emission points (4E1 and 4E2)

Fact Sheet R13-1506D

- The Feed Loadout (11S) rate, currently permitted at 60 tph, has the actual capacity of 150 tph. There is no change in the annual capacity, tpy.
- Add existing Hatchery and Truck Shop emission sources to the current Feed Mill permit:

Hatchery:

- Diesel-fired, 750 BHP (5.25 mm Btu/hr) **Emergency Generator**
- Natural gas-fired,1.68 mm Btu/hr Hot Water Heater (for Hatchery use/sanitation)
- Thirty-one (31), natural gas-fired **Comfort Heating Units** (to provide space/comfort heating for the Hatchery)

Truck Shop:

- Two (2), Used Oil Heaters (provides space heating for the Truck Shop during cold weather; oils generated during fleet vehicle maintenance activities at the Truck Shop)
- Document the facility's correct NAICS codes.

Process Description

See Attachment 1 to this evaluation for process description information on the **Poultry Feed Mill** which has been permitted in the past.

Poultry Feed Mill

Receiving Operations (2AS, 4S) (see Attachment 1)

Fact Sheet R13-1506D

Materials Handling and Storage (2BS, 2CS, 3S)

Grain, ingredients, and other products are conveyed via conveyors, elevators, etc. to storage bins/silos or for processing inside the Mill. Conveyors, elevators, etc. are generally enclosed or are located indoors. However, fugitive emissions may result from headhouse and grain handling activities (2BS). Primary grain storage includes concrete silos and steel bins. These silos and bins have multiple small vents (3S) to allow displaced air to exit while the silos/bins are being filled with grain.

Note: The <u>Main Ingredient Receiving Distribution System</u> was an undocumented source up until now. Its description is given below:

Many ingredients received are conveyed using the <u>Main Ingredient Receiving Distribution System (2CS; 2CE)</u> which includes a turnhead that distributes ingredients to additional conveying systems or storage bins. This System is aspirated by a Baghouse (2C) which aids in air movement and associated material transfer and allows air generated from product movement to be filtered before exhausting to the atmosphere. Collected materials in the baghouses are returned to the respective conveying system. Ingredients are transferred to storage bins inside the Mill.

Grain Grinding (5S, 6S, 10 S) (see Attachment 1)

Batching and Mixing (see Attachment 1)

Pelleting (7S, 9S)

Finished Feed Truck Loadout (11S)

Hatchery

A pro-longed power outage would be devastating to poultry operations. The Hatchery is planning to install a new 1,000 KW (1,490 BHP) diesel-fired generator (2H), along with an existing 500 KW (750 BHP) diesel-fired generator (1H), to provide power to critical Hatchery operations in the event of a power outage or other emergency. The generator engines will fire No. 2 fuel oil.

In addition to the generators, there are also other smaller combustion emission sources at the Hatchery. A 1.68 mm Btu/hr, natural gas-fired Hot Water Boiler (3H)

Fact Sheet R13-1506D

is used to provide hot water for Hatchery operations and sanitation. There are also thirty-one (31) small natural gas-fired heating units (4H), located on the roof, used for comfort and space heating of the Hatchery building. These units range in the size from 0.10 mm Btu/hr – 0.54 mm Btu/hr.

Truck Shop

The Truck Shop generates use motor oil and other oil fluids from vehicle maintenance activities that occur onsite. The used oil is collected and stored in small above ground storage tanks. During cold weather periods, the used oil is combusted in one of two Used Oil Heaters (1TS, 2TS) to provide space/comfort heating of the Truck Shop building.

SITE INSPECTION

The writer did not inspection the site. DAQ Enforcement routinely inspects the facility. DAQ Enforcement Inspector Joseph Kreger from Enforcement's Eastern Panhandle Regional Office (Romney, WV) completed a full onsite inspection of the facility on October 25, 2013 at which time the facility was given the inspection code of 30 for in compliance.

Directions to the facility as given in the application:

From downtown Moorefield, head south on WV Route 220 for approximately 1.5 miles to Moorefield Industrial Park Road on the right.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The writer review Pilgrim's calculations and found them to be logical and correct. The writer's own calculations are given in Attachment 3 to this evaluation. Emissions resulting from this evaluation are estimated to increase by the following amounts:

Fact Sheet R13-1506D

Pollutant	Emission Increase from Modification R13-15067D		Comments		
	(lb/hr)	(ton/yr)			
PM	5.24	3.67	Increase from Feed Mill (2CS; 2CE), Main Ingredient Receiving Distribution System: 0.13 lb/hr and 0.56 ton/yr.		
			Increase from Feed Mill (4S; 4F1 & 4F2), Pneumatic System (Truck Unloading): 0.10 lb/hr and 0.43 ton/yr.		
			Decrease from Feed Mill (11S; 11E), Feed Shipping: 0.10 lb/hr and 0.16 ton/yr. Feed Shipping determined to be a fugitive emission source.		
			Increase from <u>Hatchery</u> Emergency Generator Engines [(1H; 1HE) and (2H; 2HE)]:4.86 lb/hr and 1.22 tons/yr.		
			Increase from <u>Hatchery</u> Hot Water Boiler (3H; 3HE) and Comfort Heating Units (4H; 4HE): 0.10 lb/hr and 0.94 ton/yr.		
			Increase from <u>Truck Shop</u> Used Oil Heaters [(1TS; 1TSE) and (2TS; 2TSE)]: 0.15 lb/hr and 0.68 ton/yr.		
NOx	70.53	23.33	Increase from <u>Hatchery</u> Emergency Generator Engines [(1H; 1HE) and (2H; 2HE)]:69.15 lb/hr and 17.29 tons/yr.		
			Increase from <u>Hatchery</u> Hot Water Boiler (3H; 3HE) and Comfort Heating Units (4H; 4HE): 1.30 lb/hr and 5.96 ton/yr.		
			Increase from <u>Truck Shop</u> Used Oil Heaters [(1TS; 1TSE) and (2TS; 2TSE)]: 0.08 lb/hr and 0.35 ton/yr.		
co	16.00	8.56	Increase from <u>Hatchery</u> Emergency Generator Engines [(1H; 1HE) and (2H; 2HE)]:14.90 lb/hr and 3.73 tons/yr.		
			Increase from <u>Hatchery</u> Hot Water Boiler (3H; 3HE) and Comfort Heating Units (4H; 4HE): 1.09 lb/hr and 4.78 ton/yr.		
			Increase from <u>Truck Shop</u> Used Oil Heaters [(1TS; 1TSE) and (2TS; 2TSE)]: 0.01 lb/hr and 0.05 ton/yr.		

Pollutant	Emission Increase from Modification R13-15067D		Comments	
	(lb/hr)	(ton/yr)		
SO2	4.70	1.76	Increase from <u>Hatchery</u> Emergency Generator Engines [(1H; 1HE) and (2H; 2HE)]:4.55 lb/hr and 1.14 tons/yr.	
			Increase from <u>Hatchery</u> Hot Water Boiler (3H; 3HE) and Comfort Heating Units (4H; 4HE): 0.01 lb/hr and 0.03 ton/yr.	
			Increase from Truck Shop Used Oil Heaters [(1TS; 1TSE) and (2TS; 2TSE)]: 0.14 lb/hr and 0.59 ton/yr.	
VOC	5.72	1.74	Increase from <u>Hatchery</u> Emergency Generator Engines [(1H; 1HE) and (2H; 2HE)]:5.65 lb/hr and 1.41 tons/yr.	
			Increase from <u>Hatchery</u> Hot Water Boiler (3H; 3HE) and Comfort Heating Units (4H; 4HE): 0.07 lb/hr and 0.31 ton/yr.	
			Increase from Truck Shop Used Oil Heaters [(1TS; 1TSE) and (2TS; 2TSE)]: 0.00 lb/hr and 0.02 ton/yr.	

REGULATORY APPLICABILITY

Pilgrim's Moorefield Complex is a non-major, stationary source under Rule 13; is exempt from Title V permitting and is an area source for Hazardous Air Pollutants (HAPs).

The following State and Federal Rules were examined for applicability:

45CSR2 - "To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers"

Section 3 of this rule applies to Pilgrim's:

One (1) 1.68 mm Btu/hr NG Hot Water Boiler
Thirty-one (31) 11.294 mm Btu/hr (Total) NG Comfort Heating Units
Two (2) 0.5 & 0.25 mm Btu/hr Used Oil Heaters

Fact Sheet R13-1506D

According to Section 11.1: "Any fuel burning unit(s) having a heat input under ten (10) million B.T.U.'s per hour will be exempt from sections 4, 5, 6, 8 and 9." CAMC's boilers each have a heat input of 4.5MM Btu/hr. Exempted sections:

- Section 4 is entitled: "Weight Emission Standards."
- Section 5 is entitled: "Control of Fugitive Particulate Matter."
- <u>Section 6</u> is entitled: "Registration."
- <u>Section 8</u> is entitled: "Testing, Monitoring, Recordkeeping and Reporting."
- Section 9 is entitled: "Start-ups, Shutdowns and Malfunctions."

Applicable/non-exempted sections:

- Section 3 is entitled, "Visible Emissions of Smoke And/Or Particulate Matter Prohibited And Standards of Measurement.:"
- Section 7 is entitled, "Permits;"
- Section 10 is entitled, "Variances;"
- Section 11 is entitled, "Exemptions;" and
- <u>Section 12</u> is entitled, "Inconsistency Between Rules."

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1.]

Note that visible emission checks for all the above listed equipment are not required because the equipment is exempted from Section 8 of Rule 2.

45CR10 - "To Prevent and Control Air Pollution From the Emission of Sulfur Oxides."

With regards to all the equipment listed above under 45CSR2:

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

Moorefield Feed Mill, Hatchery and Truck Shop Complex

According to Section 10.1: "Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 through 8." Exempted sections:

- <u>Section 3</u> is entitled: "Sulfur Dioxide Weight Emission Standards for Fuel Burning Units."
- Section 6 is entitled: "Registration."
- <u>Section 7</u> is entitled: "Permits."
- Section 8 is entitled: "Testing, Monitoring, Recordkeeping and Reporting."

Applicable/non-exempted sections have no substantive requirements or no applicable requirements:

- Section 4 is entitled, "Standards for Manufacturing Process Source Operations;"
- Section 5 is entitled, "Combustion of Refinery or Process Gas Streams;"
- Section 9 is entitled, "Variance;"
- Section 10 is entitled "Exemptions and Recommendations;"
- Section 11 is entitled, "Circumvention;" and
- <u>Section 12</u> is entitled, "Inconsistency Between Rules."

45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation."

Pilgrim's submitted a complete application (February 24, 2017) for the construction of two diesel-fueled emergency generator sets, one (1) NG Hot Water Boiler, thirty-one (31) NG Comfort Heating Units, and two (2) Used Oil Heaters; ran a legal advertisement (*The Moorefield Examiner*, January 18, 2017); and paid a \$2,000 application fee (January 18, 2017 - \$1,000 application fee; January 19, 2017 - \$1,000 NSPS fee; and February 24, 2017 - \$2,500.00 MACT fee) to obtain a modification permit.

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

The \$2,500 MACT fee was refunded because the DAQ did not take delegation of the Feed Manufacturing NESHAP, 40 CFR 63, Subpart DDDDDDD (7D),

45CSR16 "Standards of Performance for New Stationary Sources"

Adopts by reference the standards of performance for new stationary sources promulgated by the United States Environmental Protection Agency pursuant to section 111(b) of the federal Clean Air Act, as amended (CAA). This rule codifies general procedures and criteria to implement the standards of performance for new stationary sources set forth in 40 CFR Part 60. The rule also adopts associated reference methods, performance specifications and other test methods which are appended to these standards.

40 CFR 60, Subpart IIII applies to the new 1,490 BHP, diesel-fueled emergency diesel-fired engine/generator set. See below.

40CSR30 - "Requirements for Operating Permits."

Although subject to 40 CFR 60 Subpart IIII, the facility is exempt from Title V permitting.

45CSR34 - "Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR, Part 63"

This rule establishes and adopts a program of national emission standards for hazardous air pollutants (NESHAPS) and other regulatory requirements promulgated by the United States Environmental Protection Agency pursuant to 40 CFR Parts 61, 63 and section 112 of the federal Clean Air Act, as amended (CAA). This rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the eight substances listed as hazardous air pollutants in 40 CFR §61.01(a), or one or more of the substances listed as hazardous air pollutants in section 112(b) of the CAA. The Secretary hereby adopts these standards by reference. The

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

Moorefield Feed Mill, Hatchery and Truck Shop Complex

Secretary also adopts associated reference methods, performance specifications and other test methods which are appended to these standards.

40 CFR 60, Subpart ZZZZ applies to the existing 750 BHP, diesel-fueled emergency diesel-fired engine/generator set. See below.

40 CFR 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines."

On July 11, 2006 the USEPA issued the NSPS for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). This rule outlines standards of performance for stationary compression ignition (CI) internal combustion engines (ICE). The rule segments applicability primarily by whether the applicant is an engine manufacturer, or an owner/operator.

Pilgrim's new 1,490 BHP diesel-fueled emergency generator engine is subject to Subpart IIII because the engine is a stationary CI ICE that commenced construction after July 11, 2005, and was manufactured after April 1, 2006 and is not a fire pump engine.

The generator engine manufacturer must certify that their engine meets the emissions standards for nonroad CI engines in 40 CFR and as such is not required to perform an initial performance test. The unit will be operated as an emergency generator and will be limited to 100 hours per year for maintenance and testing. Additionally, the engine must be operated and maintained according to the manufacturer's written instructions or the permittee's own maintenance. See Section 7 of permit R13-1506D (also in Attachment 2 to this evaluation) for further Subpart IIII requirements.

40CFR63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combust Engines."

Fact Sheet R13-1506D

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. The subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

Pilgrim's is classified as an area source of HAP emissions (individual HAP with potential emissions less than or equal to 10 ton/yr; aggregated HAP with potential emissions less than or equal to 25 ton/yr) and will remain so after the issuance of this modification permit.

Because the existing 750 BHP, stationary engine was constructed before June 12, 2006, is greater than 500 HP, and is located at an area source of HAP, it is classified as an affected source under 40 CFR 63 Subpart ZZZZ. See Section 6 of permit R13-1506D (also in Attachment 2 to this evaluation) for Subpart ZZZZ requirements.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The combustion of natural gas and diesel fuel results in the formation of small amounts of Hazardous Air Pollutants (HAP).

AIR QUALITY IMPACT ANALYSIS

This modification is determined to be a minor modification to an existing minor source, as defined in 45CSR14. No modeling studies were performed.

MONITORING OF OPERATIONS

The following <u>Feed Mill</u> sources are now required to perform monthly visible emission checks:

2CE - Baghouse for Main Ingredient Receiving Distribution System (unpermitted source until R13-1506D).

Fact Sheet R13-1506D

For the <u>Hatchery</u> Emergency Generator Engines (1H and 2H), the permittee shall monitor and record the monthly and rolling twelve-month total hours of operation for the engines.

There are no monitoring requirements for:

- The <u>Hatchery</u> Natural Gas-fired Hot Water Boiler (3H) and Natural Gas-fired Comfort Heating Units (4H).
- The Truck Shop Used Oil Heaters (1TS and 2TS).

CHANGES TO PERMIT R13-1560D

See Attachment 2 to this evaluate for a compare file comparing R13-1506D (new permit) to R13-1506C (previous permit).

Pilgrim's specifically requested (in their cover letter to the application) that the following change be made to the permit because:

"The current wording of this Condition requires undue burden (i.e., keeping records of the date, time and location of deliveries). We believe that keeping monthly records of the total ingredients received and total finished feed shipped is sufficient to show compliance with Permit Condition 5.1.4."

Before: 5.4.5. For determining compliance with the PM emission limitations established under permit condition 5.1.4., the permittee shall maintain accurate records for each truck/railcar shipment detailing the arrival/departure: date and time, specific load/unloading location, and amount of material(s) (corn, soybean mill, additives, product, etc.) entering or leaving the facility. These records shall be certified by the responsible official and maintained on site for a period of no less than five (5) years, and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request. (2AE, 4E1, 4E2, 11E and 12E)

After: 5.4.5. For determining compliance with the PM emission limitations established under permit condition 5.1.4., the permittee shall maintain accurate monthly records for each

Fact Sheet R13-1506D

truck/railcar shipment detailing the arrival/departure: date and time, specific load/unloading location, and amount of material(s) (corn, soybean mill, additives, product, etc.) entering or leaving the facility of ingredients received and finished feed shipped. These records shall be certified by the responsible official and maintained on site for a period of no less than five (5) years, and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request. (2AE, 4E1, 4E2, 11E and 12E)

The writer agreed with Pilgrim's proposed change.

The last line in Table 5.1.4 in the permit was deleted because the emission source was re-classified as being a fugitive emission source:

Emi	ssion	Source	e	PM After	Controls
Unit ID No.	Point ID No.	Equipment	Control Device	lb/hr	Тру
11S	11E	Feed Shipping	Full Enclosure	0.04	0.16

The writer agreed with Pilgrim's proposed change.

RECOMMENDATION TO DIRECTOR

The information in the permit application complies with all applicable regulations. Therefore, it is the writer's recommendation that this modification permit for the addition of a 1,490 BHP, diesel-fueled emergency generator engine and several other previously unpermitted sources be granted to Pilgrim's Pride Corporation.

John Legg

DAQ Permit Writer

April 25, 2017

Date

Fact Sheet R13-1506D

Attachment 1

Permit R13-1506D Prilgrim's Pride Corporation Moorefield, WV Poultry Feed Mill, Hatchery and Truck Stop

The following information came from permit application R13-1506D, Attachment G:

General Facility Description

The Pilgrim's Pride Corporation Moorefield Poultry Feed Mill (Mill), Hatchery and Truck Shop are located in Moorefield, West Virginia.

The <u>Mill</u> receives grain, soybean meal and other ingredients via truck and rail for the purpose of making poultry feed. Ingredients are ground, mixed, batched and pelleted into finished poultry feed. Finished poultry feed is loaded onto trucks to transport offsite to contract poultry growers. Operations at the Mill fall under NAICS 311119 – chicken feeds, prepared, manufacturing.

The <u>Hatchery</u> receives eggs from contract growers, incubates and hatches the eggs and ships the hatched chicks to contract chicken growers. Hatchery operations are under NAICS 112340 – poultry hatcheries.

The <u>Truck Shop</u> maintains fleet vehicles used in the transportation of poultry feeds and other poultry products. Activities include major/minor vehicles repairs, lubrication, maintenance, and tire replacement. Truck Shop operations are under NACIS 484220 – specialized freight trucking, local.

Feed Mill

Receiving Operations (2AS, 4S)

Grain (corn, soybean meal, dried distillers grains, etc.), softstock ingredients (meat & bone meal, etc.) and other dry ingredients are received via truck and railcar at the North Rail Station (2AS) and South Rail and Truck Station (2AS). Emissions from truck and rail receiving consist of fugitive emissions caused by the emptying of ingredients from a truck or railcar. Fugitive emissions are minimized from the Truck and Railcar Receiving Pits by using choke feeding as applicable. Truck receiving operations occur in a metal-sided building that is enclosed except for the entrance/exit to the receiving pit, which also minimizes fugitive emissions. Ingredients are conveyed from the pits through a series of screw conveyors, elevators, etc.

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

Moorefield Feed Mill, Hatchery and Truck Shop Complex

Various ingredients, such as salt, phosphate and limestone, are received pneumatically (4S). A delivery truck will connect to the receiving pipe, and ingredients are blown (using a truck mounted blower) through the piping into the top of storage bins located atop the Mill. Displaced air that results from filling the bins is aspirated through one of three baghouses that sit atop the pneumatically received storage bins. There are two baghouses (4C1, 4C2) that are vented and exhaust outdoors. There is a third baghouse (technically a cartridge filter which is similar to a baghouse) that exhausts indoors and is not considered an emission source.

Materials Handling and Storage (2BS, 2CS, 3S)

Grain, ingredients and other products are conveyed via conveyors, elevators, etc. to storage bins/silos or for processing inside the Mill. Conveyors, elevators, etc. are generally enclosed or are located indoors. However, fugitive emissions may result from headhouse and grain handling activities (2BS). Primary grain storage includes concrete silos and steel bins. These silos and bins have multiple small vents (3S) to allow displaced air to exit while the silos/bins are being filled with grain.

Many ingredients received are conveyed using the Main Ingredient Receiving Distribution System (2CS) which includes a turn-head that distributes ingredients to additional conveying systems or storage bins. This System is aspirated by a Baghouse (2C) which aids in air movement and associated material transfer and allows air generated from product movement to be filtered before exhausting to the atmosphere. Collected materials in the baghouses are returned to the respective conveying system. Ingredients are transferred to storage bins inside the Mill.

Grain Grinding (5S, 6S, 10 S)

Grain (corn) is conveyed from the storage silos/bins to one of three Hammermills (5S, 6S, 10S) for grinding. The hammermills grind the corn for use in the finished feed. Each Hammermill is aspirated by a baghouse (5C, 6C, 10C) to increase product throughput through the Hammermill and to recover ground grain. Each baghouse serves a primary product processing function and a secondary air pollution control function. Ground grain is conveyed to storage bins to await batching and mixing.

Batching and Mixing

Ground grain is combined with softstock ingredients, minerals and other micro ingredients in the mixer(s) to produce mixed feed prior to pelleting. This process occurs completely inside the Mill with no direct atmospheric emissions.

Pelleting (7S, 9S)

Mixed feed (also referred to as mash feed) is conveyed to one of two pelleting systems. Each pelleting system consists of a pellet mill, which pelletizes the feed, and a pellet cooler(s) which cools the feed pellets. The Pellet Coolers are each aspirated by a set of cyclones operating in parallel (7C, 9C), and each cyclone system is a negative air system controlled by a fan which discharges to the atmosphere. The cyclones operate primarily as a product collector and serve a secondary air pollution control function. Steam from the Boilers are used in the pelleting process.

Boilers (1S, 8S)

The boilers (1S, 8S) are each 500 HP Boilers which fire natural gas. Each boiler has the ability to fire No. 2 fuel oil on a limited basis during natural gas curtailments and for maintenance/testing. The Boilers provide steam for milling operations.

Finished Feed Truck Loadout (11S)

Finished feed is loaded out onto trucks for delivery to contract growers. Finished feed loadout occurs in a loadout bay (11S) in a two-sided building that is only open at the truck entrance/exit, which provides additional emissions control (emissions control provided by the two-sided structure). Fugitive particulate emissions occur during the truck loading process. Loading spouts are installed on the feed loadout assembly to minimize fugitive emission from this operation by reducing the distance between the loadout spouts and the trucks being loaded with poultry feeds.

Discussion of Manganese Storage, Usage and Handling

Note: The Feed Mill portion of Pilgrim's Feed Mill, Hatchery and Truck Shop Complex is subject to the Feed Manufacturing NESHAP [40 CFR 63, Subpart DDDDDDD (7D)]. The State of West Virginia under State Rule 45CSR34 declined to take delegation

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

Moorefield Feed Mill, Hatchery and Truck Shop Complex

of Subpart 7D and as such, does not have the regulatory authority to incorporate Subpart 7D requirements into this state modification permit.

The Mill uses a trace minerals ingredient that contain manganese. The trace minerals are typically received in 50-lb bags. The manganese component of this ingredient ranges from approximately 10%-15% depending upon the feed formulation. The trace minerals are mixed into the feed by manually emptying the trace minerals bags into the micro mixing system.

The <u>micro mixing system</u> is a set of small hoppers that are kept covered, except when being filled with an ingredient. The trace minerals are slowly conveyed out the bottoms of the small hoppers and mixed into the feed. The <u>micro mixing system</u> and mixing systems are enclosed systems located inside the Mill. The manganese constitutes less than 0.01% of the finished feed. Housekeeping of areas where manganese is stored, used and handled is performed in accordance with 40 CFR 63.11621(a).

After mixing, the mixed feed is conveyed to bins to await pelleting. The feed is conveyed from the mixed feed storage bins to one of the two pelleting system. Each pelleting system operates in a similar manner. The mixed feed is conditioned (heated with steam) in a conditioner and fed into a pellet mill, which pelletizes the feed. The pelleted feed is then conveyed through a cooler (a chamber for mixing with air) to cool the pellets before being conveyed to finished feed storage. The air is pulled through the cooler, filtered by cyclone collectors before exhausting outdoors through the fan. Particulate picked up by the airstream in the coolers is dropped out in the cyclone collectors. These systems are shown in Attachment F. The pellet cooler cyclones are maintained in accordance with 40 CFR 63.11621(f).

The pelleted (finished) feed is conveyed from the coolers to await loadout into trucks as described above. Feed loadout occurs in accordance with 40 CFR 63.11621(d).

Hatchery

A pro-longed power outage would be devastating to poultry operations. The Hatchery is planning to install a new 1,000 KW diesel-fired generator (2H), along with an existing 500 KW diesel-fired generator (1H), to provide power to critical Hatchery operations in the event of a power outage or other emergency. The generator engines will fire No. 2 fuel oil.

In addition to the generators, there are also other smaller combustion emission sources at the Hatchery. A natural gas-fired Hot Water Boiler (3H) is used to provide hot water for Hatchery operations and sanitation. There are also numerous small natural gas-fired

Fact Sheet R13-1506D

Pilgrim's Pride Corporation

Moorefield Feed Mill, Hatchery and Truck Shop Complex

heating units (4H), located on the roof, used to comfort and space heating of the Hatchery building. There are currently 31 units, raging in the size from 0.10 mm Btu/hr - 0.54 mm Btu/hr.

Truck Shop

The Truck Shop generators use motor oil and other oil fluids from vehicle maintenance activities that occur onsite. The used oil is collected and stored in small above ground storage tanks. During cold weather periods, the use of oil is combusted in one of two Used Oil Heaters (1TS, 2TS) to provide space/comfort heating of the Truck Shop building.

Attachment 2

Permit R13-1506D Prilgrim's Pride Corporation Moorefield, WV Poultry Feed Mill, Hatchery and Truck Stop

Compare File (Comparing R13-1506D to R13-1506C)

WordPerfect Document Compare Summary

Original document: Q:\AIR QUALITY\J LEGG\Pilgrims

Pride\031-00005 PERM 13-1506C.wpd

Revised document: Q:\AIR_QUALITY\J LEGG\Pilgrims

Pride\031-00005 PERM 13-1506D.wpd

Deletions are shown with the following attributes and color:

Strikeout, Blue RGB(0,0,255). Deleted text is shown as full text.

Insertions are shown with the following attributes and color:

Double Underline, Redline, Red RGB(255,0,0).

Moved blocks are marked in the new location, and only referenced in the old location.

Moved block marks are shown in the following color:

Orange RGB(255,200,0).

The document was marked with 124 Deletions, 151 Insertions, 1 Move.

West Virginia Department of Environmental Protection Division of Air Quality Randy C. Hat

Jim Justice Governor Randy C. Huffman Austin
Caperton
Cabinet Secretary

Permit to Modify



R13-1506CD

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Pilgrim's Pride Corporation Moorefield Feed Mill, <u>Hatchery and Truck Shop Complex</u> 031-00005

> William F. Durham Director

Issued: December 21, 2015 Draft

This permit will supercede and replace Permit R13-1506BC.

Facility Location: Moorefield, Hardy County, West Virginia Mailing Address: P.O. Box 539, Moorefield, WV 26836

Facility Description: Prepared Feed and Feed Ingredients for Animals and Fowls, Except Dogs and Cats

SIC Codes: 2048 - Prepared Feed and Feed Ingredients for Animals and Fowls, Except Dogs and Cats 311611 - Animal (except Poultry) Slaughtering Feed Mill - 311119 - Other Animal Food NAICS:

Manufacturing

Hatchery - 112340 - Poultry Hatcheries

Truck Shop - 484220 - Specialized Freight (except Used Goods) Trucking, Local

UTM Coordinates: 674.2868450 km Easting • 4,323.6315 km Northing • Zone 17

Lat/Long Coordinates: Latitude 39.0444 Longitude -78.9861

Permit Type: Modification

Description of Change:

Double the facility's grain unloading rate to 1,120 ton/hr (from train) by replacing handling equipment (conveyors, elevator, and turn heads to existing silos) and building a silo. Increase truck activity for soybean mill, corn, and additives delivery.

Because Pilgrim's prefers a single air permit, sources located at the Hatchery and Truck Shop will be added to the company's current Feed Mill permit. The only new construction associated with this application is a new 1,490 BHP/1,000 KW emergency generator engine to be located at the Hatchery. Several items found during a recent internal Pilgrim's audit were corrected/added

in the updated permit.

The Feed Mill portion of Pilgrim's Feed Mill, Hatchery and Truck Shop Complex is subject to Note:

> the Feed Manufacturing NESHAP [40 CFR 63, Subpart DDDDDDD (7D)]. The State of West Virginia under State Rule 45CSR34 declined to take delegation of Subpart 7D and as such, does not have the regulatory authority to incorporate Subpart 7D requirements into this state

modification permit.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

This permit does not affect 45CSR30 applicability, the source is a nonmajor source subject to 45CSR30.

Table of Contents

1.0.	Emission	ı Units	4 <u>5</u>
2.0.	General (Conditions	6 8
_,,,	2.1.	Definitions	
	2.2.	Acronyms	-
	2.3.	Authority	
	2.4.	Term and Renewal	
	2.5.	Duty to Comply	_
	2.6.	Duty to Provide Information.	
	2.7.	Duty to Supplement and Correct Information	8 10
	2.8.	Administrative Permit Update	8 <u>10</u>
	2.9.	Permit Modification	8 <u>10</u>
	2.10.	Major Permit Modification	8 10
	2.11.	Inspection and Entry	8 <u>10</u>
	2.12.	Emergency	8 10
	2.13.	Need to Halt or Reduce Activity Not a Defense	9 <u>11</u>
	2.14.	Suspension of Activities	9 <u>11</u>
	2.15.	Property Rights	9 <u>11</u>
	2.16.	Severability	1 0 2
	2.17.	Transferability	1 0 2
	2.18.	Notification Requirements	1 0 2
	2.19.	Credible Evidence	1 0 2
3.0.	Facility-V	Wide Requirements Limitations and Standards	_
	3.2.	Monitoring Requirements	1+ <u>3</u>
	3.3.	Testing Requirements	1+ <u>3</u>
	3.4.	Recordkeeping Requirements	1 3 <u>5</u>
	3.5.	Reporting Requirements	13
4 <u>15</u>			
<u>4.0.</u>		pecific Requirements [Control Devices]	
	<u>4.1.</u>	Limitations and Standards	<u> 17</u>
	<u>4.2.</u>	Monitoring Requirements Testing Requirements Recordkeeping Requirements Reporting Requirements	<u> 17</u>
	<u>4.3.</u>	Testing Requirements	<u> 17</u>
	<u>4.4.</u>	Recordkeeping Requirements	<u> 17</u>
	<u>4.5.</u>	Reporting Requirements	<u> 18</u>
<u>5</u> .0.		pecific Requirements	15
——4 <u>[F</u>	eed Mill	<u>19</u>	
	<u>5.1.</u>	Limitations and Standards	
	<u>5.2.</u>	Monitoring Requirements	
	<u>5.3.</u>	Testing Requirements	
	5.1. 5.2. 5.3. 5.4. 5.5.	Recordkeeping Requirements	
	<u>5.5.</u>	Reporting Requirements	<u>23</u>

<u>6.0.</u>	Source-S	pecific Requirements [Hatchery: Emergency Diesel Generator Engine (11	I)]24
		Limitations and Standards	
	6.1. 6.2. 6.3. 6.4. 6.5.	Monitoring Requirements.	26
	<u>6.3.</u>	Testing Requirements	27
	<u>6.4.</u>	Recordkeeping Requirements	27
	<u>6.5.</u>	Reporting Requirements	
<u>7.0.</u>	Source-S	pecific Requirements [Hatchery: Emergency Diesel Generator Engine (2)	I)]28
	7.1.	Limitations and Standards	
	7.2.	Monitoring Requirements	29
	7.3.	Testing Requirements	
	7.2. 7.3. 7.4. 7.5.	Recordkeeping Requirements	30
	$\frac{7.5.}{}$	Reporting Requirements	30
	8.1. 8.2. 8.3. 8.4. 8.5.	Limitations and Standards Monitoring Requirements Testing Requirements Recordkeeping Requirements Reporting Requirements	31 31 31 32
<u>9.0.</u>	Source-S	pecific Requirements [Truck Shop: Used Oil Heaters (1TS &2TS)]	33
	<u>9</u> .1.	Limitations and Standards	15 33
	<u>49</u> .2.	Monitoring Requirements	
	4 <u>9</u> .3.	Testing Requirements	
	4 <u>9</u> .4.	Recordkeeping Requirements	
	4<u>9</u>.5 .	Reporting Requirements	19 <u>35</u>
APPEND	IX A		20 <u>36</u>
CERTIFI	CATION O	DF DATA ACCURACY	21 <u>37</u>

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Desig	gn Capacity	Control Device
		<u>re</u>	ED MILL			
1S	1E	Boiler 1	2002	21.0	mmBtu/hr	None
2AS	2A <u>E</u>	Grain Receiving (North Rail Station)	2015	1,120 tph Corn	Combined Total 330,000 tpy Corn &	FE FE
		(South Rail Station and Truck Station)	1992	200 tph Soybean Mill	120,000 tpy Soybean Mill	112
2BS	2BE	Headhouse and Grain Handling	1992/2015	1,120 tph (Max)/330,000 tpy Corn North Railcar Receiving & 120,000 tpy Soybean Mill		FE
<u>2CS</u>	2 <u>CE</u>	Main Ingredient Receiving Distribution System (Unpermitted until 2017)	<u>1992</u>	<u>200 tph</u> <u>450,000 tpy</u>		2C Baghouse
3S	3E	All Grain Storage (1) (Silos 1 thru 4, 6, 7 and New Corn Silo)	1992/2015	1,120 tph into Corn storage 200 tpy/120,000 tpy Corn or Soybean Mill		FE
4S	4E4E1 and 4E2	Pneumatic <u>Receiving</u> System <u>s</u> (Truck Unloading)	1992	Variable<u>25 tph</u> ^{(a}l)		4C (4) 4C1 and 4C2 2 Baghouses
5S	5E	Crusher (Hammermill)	1992	38 tph	330,000 tpy	5C Baghouse
6S	6E	Crusher (Hammermill)	1992	38 tph	Corn	6C Baghouse
10S	10E	Crusher (Hammermill)	2005	38 tph		10C

1.0 Emission Units

1.0 E ₁	mission Un	nits	<u>-</u>			
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Desig	n Capacity	Control Device
7S	7E	Pellet System	1992	50 tph		7C Cyclone
9S	9E	Pellet System	2002	40 tph	478,000 tpy	9C Cyclone
8S	8E	Boiler 2	2002	21.0	mmBtu/hr	None
11S	11E	Feed Shipping	1992	60 <u>(3)</u> 150	tph/478,000 tpy	FE
12S	12E	Vehicle Activity (2)	1992	24,883 tr	icks maximum	None
			- Control Equi Devices	pment		
<u>2C</u>	<u>2E</u>	Baghouse (for Main Ingredient Receiving Distribution System)	<u>1992</u>	:	<u>NA</u>	<u>None</u>
4C <u>1</u>	4E <u>I</u>	Baghouse (for Pneumatic Truck Unloading System)	1992		NA	None
<u>4C2</u>	<u>4E2</u>	Baghouse (for Pneumatic Truck Unloading Systems)	<u>1992</u>		<u>NA</u>	<u>None</u>
5C	5E	Baghouse (for Crusher)	1992		NA	None
6C	6E	Baghouse (for Crusher)	1992		NA	None
7C	7E	Cyclone [for Pellet System (7S)]	1992		NA	None
9C	9E	Cyclone [for Pellet System (9S)]	2002		NA	None
10C	10E	Pulse Jet Dust Collector (for Crusher)	2005		NA	None

1.0 E	mission Un	its					
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device		
(1)	(1) Grain Storage (Silos 1 thru 4, 6, 7 and new Silo) is listed herein because the hourly feed rate into the unit will be increased from 560 tons per hour to 1,120 tons per hour and a new corn silo is proposed to be installed.						
(2)	Changed from pneum		ate depends on	eumatic System is used to receive	e material		
(<u>2</u>) (<u>3</u>) (<u>4</u>)	The vast maincludes vehicled Hourly Feed	nicle activity associated with Loadout rate increased (fro	Hatchery and om 60 tph) to 1:				
			TCHERY				
<u>1H</u>	<u>1HE</u>	<u>Diesel Engine for</u> <u>Emergency Generator</u> (Cummins)	<u>1992</u>	750 BHP/ 500 KW/ 5.25 mm Btu/hr	None		
<u>2H</u>	<u>2HE</u>	<u>Diesel Engine for</u> <u>Emergency Generator</u> <u>(Cummins)</u>	<u>2017</u>	1,490 BHP/ 1,000 KW/ 10.43 mm Btu/hr	<u>None</u>		
<u>3H</u>	<u>3HE</u>	<u>Hot Water Boiler</u> (Natural Gas-fired)	<u>2004</u>	1.68 mm Btu/hr	None		
<u>4H</u>	<u>4HE</u>	Comfort Heating Units (units located on roof at various locations) (Natural Gas-fired)	<u>1991</u>	11.294 mm Btu/hr (Total for 31 Units) 0.10 - 0.54 mm Btu/hr (Individual Units Range)	<u>None</u>		
TRUCK SHOP							
<u>1TS</u>	<u>1TSE</u>	<u>Used Oil Heater</u> <u>Clean Burn CB-5000</u>	<u>???</u>	3.30 gal/hr 0.50 mm Btu/hr	None		
<u>2TS</u>	2TSE	<u>Used Oil Heater</u> <u>Clean Burn CB-2500</u>	<u>????</u>	1.70 gal/hr 0.25 mm Btu/hr	<u>None</u>		

Permit R13-1506D	
Pilgrim's Pride Corporation •	Moorefield Feed Mill, Hatchery and Truck Shop Complex

Page 9 of 40

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO _x	Nitrogen Oxides
CBI	Confidential Business	NSPS	New Source Performance
	Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	$PM_{2.5}$	Particulate Matter less than
C.F.R. or CFR	Code of Federal Regulations	2.0	2.5µm in diameter
CO	Carbon Monoxide	PM_{10}	Particulate Matter less than
C.S.R. or CSR	Codes of State Rules	10	10μm in diameter
DAQ	Division of Air Quality	Ppb	Pounds per Batch
DEP	Department of Environmental	pph	Pounds per Hour
	Protection	ppm	Parts per Million
dscm	Dry Standard Cubic Meter	Ppmv or	Parts per million by
FOIA	Freedom of Information Act	ppmv	volume
HAP	Hazardous Air Pollutant	PSD	Prevention of Significant
HON	Hazardous Organic NESHAP		Deterioration
HP	Horsepower	psi	Pounds per Square Inch
lbs/hr	Pounds per Hour	SIC	Standard Industrial
LDAR	Leak Detection and Repair		Classification
M	Thousand	SIP	State Implementation Plan
MACT	Maximum Achievable	SO ₂	Sulfur Dioxide
	Control Technology	TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	TPY	Tons per Year
MM	Million	TRS	Total Reduced Sulfur
MMBtu/hr or	Million British Thermal Units	TSP	Total Suspended Particulate
mmbtu/hr	per Hour	USEPA	United States Environmental
MMCF/hr or	Million Cubic Feet per Hour		Protection Agency
mmcf/hr		UTM	Universal Transverse
NA	Not Applicable		Mercator
NAAQS	National Ambient Air Quality	VEE	Visual Emissions Evaluation
	Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards	VOL	Volatile Organic Liquids
	for Hazardous Air Pollutants		-

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;

2.4. Term and Renewal

2.4.1. This permit supercedes and replaces previously issued Permit R13-1506BC. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-1506, R13-1506A, R13-1506B, R13-1506C, R13-1506D and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;

[45CSR§§13-5.11 and 13-10.3]

- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are not met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. Open burning. The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.

 [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.

 [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health Environmental Health require a copy of this notice to be sent to them. [40CFR§61.145(b) and 45CSR§34]
- 3.1.4. Odor. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
 [45CSR§4-3.1] [State-Enforceable Only]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.

 [45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 CSR 11.

 [45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit

and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 - 1. The permit or rule evaluated, with the citation number and language;
 - 2. The result of the test for each permit or rule condition; and,
 - 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- 3.5.2. Confidential information. A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. Correspondence. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ: If to the US EPA: Director Associate Director WVDEP Office of Air Enforcement and Compliance Division of Air Quality Assistance 601 57th Street, SE -(3AP20)Charleston, WV 25304-2345 U. S. Environmental Protection Agency Region III **DAQ** Compliance and 1650 Arch Street Enforcement1: Philadelphia, PA 19103-2029

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. Operating Fee.

- 3.5.4.1. In accordance with 45CSR30 Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

[Control Devices in Section 1.0, Emission Units Table: 2C, 4C1, 4C2, 5C, 6C, 7C, 9C and 10C]

4.1. Limitations and Standards

Text Moved Here

4.1.16. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. [45CSR§13-5.11.] (4E, 5E, 6E, 7E, 9E, and 10E)

Lind Of Moved Text

[45CSR §13-5.11.]

4.2. Monitoring Requirements

[Reserved]

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

- <u>4.4.1.</u> <u>Record of Monitoring.</u> The permittee shall keep records of monitoring information that include the following:
 - <u>a.</u> The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

(2C, 4C1, 4C2, 5C, 6C, 7C, 9C and 10C)

- 4.4.2. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

 (2C, 4C1, 4C2, 5C, 6C, 7C, 9C and 10C)
- 4.4.3. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

(2C, 4C1, 4C2, 5C, 6C, 7C, 9C and 10C)

4.5. Reporting Requirements

5.0. Source-Specific Requirements [Feed Mill]

5.1. Limitations and Standards

- 45.1.1. Boiler 1 (Emission Unit ID: 1S; Emission Point ID: 1E) and Boiler 2 (8S; 8E) shall fire only natural gas and No. 2 fuel oil and shall not be operated in a manner to exceed 16,595 lb/hr of steam or a maximum heat input of 21.0 MMBtu/hr per boiler.
- 45.1.2. Each of the above discussed boilers (1E; 8E) shall not exceed the following emission rates:

	Natu	ral Gas	No. 2 Fuel Oil		
Pollutant	lb/hr	ton/yr (1)	lb/hr	ton/yr (2)	
СО	1.76	7.73	0.75	2.28	
NO _x	2.10	9.20	3.00	9.13	
PM	0.16	0.70	0.50	1.50	
PM ₁₀	0.16	0.70	0.35	1.05	
SO_2	0.01	0.06	10.65	32.42	
VOCs	0.12	0.51	0.05	0.16	

^{(1) 8,760} hours per year.

45.1.3. Each of the above discussed boilers (1E; 8E) shall not burn/consume more than the following amounts of fuel:

Natural	Gas	#2 Fu	ıel Oil
(ft³/hr)	(ft³/hr) (ft³/yr)		(gal/yr)
21,000	183,960,000	150	913,230

45.1.4. Controlled Particulate Matter (PM) emissions from the following source vents shall not exceed the values listed below:

Emission		Source		PM After	Controls
Unit ID No.	Point ID No.	Equipment	Control Device	lb/hr	tpy
2AS	2AE	Grain Receiving	Full Enclosure	4.49	0.77
2BS	2BE	Headhouse and Grain Handling	Full Enclosure	16.10	2.75

^{(2) 6,000} hours per year.

Emis	sion	Source		PM After	Controls
Unit ID No.	Point ID No.	Equipment	Control Device	lb/hr	tpy
<u>2CS</u>	<u>2CE</u>	Main Ingredient Receiving Distribution System	Baghouse (2C)	0.13	<u>0.56</u>
38	3E	All Grain Storage	Full Enclosure	6.60	1.13
48	4E <u>1</u>	Pneumatic system (Truck Unloading)	Baghouse (4C1)	0.03	
	<u>4E2</u>		Baghouse (4C2)	0.13	<u>0.56</u>
58	5E	Crusher (Hammermill)	Baghouse	0.51	2.23
6S	6 E	Crusher (Hammermill)	Baghouse	0.51	2.23
7S	7E	Pellet System	Cyclone	3.96	17.34
9S	9E	Pellet System	Cyclone	3.96	17.34
108	10E	Crusher (Hammermill)	Baghouse	0.51	2.23

11S11EFeed ShippingFull Enclosure0:040.16

- 45.1.5. The maximum sulfur content of No. 2 fuel oil used to fire the permitted boilers shall not exceed 0.5%. Records of supplier certification for sulfur content shall be maintained on site for five years.
- 45.1.6. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR2-3.1] (1E and 8E)
- 45.1.7. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measure in terms of pounds per hour in excess of the amount determined as follows:

For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units;

[45CSR2-4.1 and 45CSR2-4.1.b.] (1E and 8E)

45.1.8. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. [45CSR7-3.1] (2AE, 2BE, 2CE, 3E, 4E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E)

- 45.1.9. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A of 45CSR7. [45CSR7-4.1.] (2AE, 2BE, 2CE, 3E, 4E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E)
- 45.1.10. No person shall cause, suffer, allow, or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained, and operated to ensure the lowest fugitive particulate emissions reasonably achievable. [45CSR7-5.1.] (2AE, 2BE, 2CE, 3E, #E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E)
- 45.1.11. Maximum Allowable Emission Rates for Similar Units in All Priority III Regions Except Region IV. -No Person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from
 all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount
 determined as follows:

For type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

[45CSR10-3.3 and 45CSR10-3.3.f.] (1E and 8E)

- 45.1.12. No owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. [40 CFR 60.42c(d)] (1E and 8E)
- 45.1.13. The owner or operator of each affected facility subject to the fuel oil sulfur limits shall submit to the quarterly reports to the Administrator. [40 CFR 60.48(d)] (1E and 8E)
- 45.1.14. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), or (3) of this section, as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplied certifications submitted represent all of the fuel combusted during the quarter. [40 CFR 60.48(e)(11)] (1E and 8E)
- 45.1.15. Fuel supplier certification shall include the following information:
 - (1) For distillate oil:
 - (i) The name of the oil supplier; and
 - (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c.

[40 CFR 60.48(f)] (1E and 8E)

Text Was Moved From Here: 1

45.2. Monitoring Requirements

45.2.1. For the purpose of determining compliance with the opacity limits of 45CSR2-3.1. and 45CSR7-3.1. and conditions 45.1.6. and 45.1.8. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of fortyfive (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of 45CSR §7A (2AE, 2BE, 2CE, 3E, 4E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E) or Method 9 (1E and 8E) as soon a practicable, but within seventy-two (72) hours of the final visual emission check. A 45CSR§7A or a Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions at that source.

45.3. Testing Requirements

N/A

45.4. Recordkeeping Requirements

- 4.4.1. Record of Monitoring. The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - The company or entity that performed the analyses:
 - d. The analytical techniques or methods used;
 - c. The results of the analyses; and
 - The operating conditions existing at the time of sampling or measurement.

(4E, 5E, 6E, 7E, 9E, and 10E)

- Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. (4E, 5E, 6E, 7E, 9E, and 10E)
- Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

(4E, 5E, 6E, 7E, 9E, and 10E)

- 45.4.4]. The permittee shall maintain records of all monitoring data required by Section 45.2.1.documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in 45CSR§7A (2AE, 2BE, 2CE, 3E, 4E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E) and Method 9 (1E and 8E), the data records of each observation shall be maintained per the requirements of 45CSR§7A (2AE, 2BE, 2CE, 3E, 4E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E) and Method 9 (1E and 8E). For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
- 45.4.52. For determining compliance with the hourly and annual limitations from the combustion of natural gas and #2 fuel oil established in conditions 45.1.2. and 45.1.3. of the permit, the permittee shall maintain accurate records of the amount of all natural gas and diesel fuel consumed and hours of operation for each fuel type. These records shall be certified by the responsible official and maintained on site for a period of no less than five (5) years, and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request. (1E and 8E)
- 45.4.52. For determining compliance with the PM emission limitations established under permit condition 45.1.4., the permittee shall maintain accurate monthly records for each truck/railcar shipment detailing the arrival/departure: date and time, specific load/unloading location, and amount of material(s) (corn, soybean mill, additives, product, etc.) entering or leaving the facility. of ingredients received and finished feed shipped. These records shall be certified by the responsible official and maintained on site for a period of no less than five (5) years, and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request. (2AE, 4E4E1, 4E2, 11E and 12E)

45.5. Reporting Requirements

45.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 45CSR§7A (2AE, 2BE, 2CE, 3E, 4E4E1, 4E2, 5E, 6E, 7E, 9E, 10E and 11E) and Method 9 (1E and 8E) must be reported in writing to the Director of the Division of Air

Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

Permit R13-1506D Pilgrim's Pride Corporation • Moorefield Feed Mill, Hatchery and Truck Shop Complex	Page 27 of 4

<u>6.0.</u> Source-Specific Requirements

[Hatchery: 750 BHP Diesel-fired Emergency Generator Engine (1H;1HE)]

6.1. Limitations and Standards

<u>6.1.1.</u> <u>Emissions from the engine shall not exceed the maximum hourly and annual emission rates specified below:</u>

Dallastant	Maximum Emission Rate			
<u>Pollutant</u>	(lb/hr)	(tpy) (1)		
<u>CO</u>	<u>4.99</u>	<u>1.25</u>		
<u>NOx</u>	23.15	<u>5.79</u>		
<u>PM</u> ₁₀	<u>1.63</u>	<u>0.41</u>		
$\underline{\underline{SO}}_2$	<u>1.52</u>	<u>0.38</u>		
<u>VOC</u>	<u>1.89</u>	<u>0.47</u>		

⁽¹⁾ Annual emission rate based on 500 hr/yr of operation.

- 6.1.2. 40 CFR 63, Subpart ZZZZ (RICE NESHAP) Requirements. The following conditions and requirements apply to the engine:
 - a. The permittee must comply with the requirements in Table 2d to this subpart:
 - <u>Change oil and filter every 500 hours of operation or annually, whichever comes first</u> (see item b);
 - Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR §63.6630(a); Table 2d, Item 4]

- b. The permittee must operate and maintain the engine according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

 [45CSR34, 40 CFR §63.6625(e)]
- <u>c.</u> The permittee must install a non-resettable hour meter if one is not already installed. [45CSR34, 40 CFR §63.6625(f)]

- d. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR §63.6625(h)]
- e. The permittee has the option of utilizing an oil analysis program to extend the time to change the generator engine's oil (see section 6.1.2.a., above). The oil analysis must be performed at 500 hours of operation or annually, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:
 - Total Base Number is less than 30 percent of the Total Base number of the oil when new;
 - <u>Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or</u>
 - <u>percent water content (by volume) is greater than 0.5.</u>

If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 days or before commencing operation, whichever is later.

The operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[45CSR34, 40 CFR §63.6625(i)]

- f. The permittee must be in compliance with emission limitations (see Section 6.1.2.a., above) in this subpart that apply to you at all times. [45CSR34, 40 CFR §63.6605(a)]
- g. At all times, the permittee must operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the engine.

[45CSR34, 40 CFR §63.6605(b)]

h. The permittee must demonstrate continuous compliance with each emission limitation in Table
 2d (see section 6.1.2.a., above) to this subpart that apply to you according to methods specified in Table 6 of this subpart.

[45CSR34, 40 CFR §63.6640(a)]

- i. The permittee must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

 [45CSR34, 40 C.F.R. §63.6640(e)]
- i. The permittee must operate the emergency engine according to the requirements of this section. In order for the engine to be consided an emergency engine under this subpart, any operation other than emergency operation, maintenance and testing, emergency demande response, and operation in nonemergency situations for 50 hours per year, as described in this section is prohibited. If you do not operate the engine according to the requirements of this section, the engine will not be considered an emergency engine under this subpart and must meet all the requirement for non-emergency engines.
 - (1) There is no time limit on the use of an emergency engine in emergency situations.
 - (2) The permittee may operate the emergency engine for any combination of purposes as specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in (3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph: i(2).
 - (i) The emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance chercks and readiness testing, but a petition is not required if the permitte maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year.
 - (4) The emergency engine may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in non-emergency situations are counted
 as part of the 100 hours per calendar year for maintenance and testing provided in paragraph
 i(2) of this section. The 50 hours per year for nonemergency situations cannot be used for
 peak shaving or non-emergency demand response, or to generate income for a facility to an
 electric grid or otherwise supply power as part of a financial arrangement with another entity.

6.2. Monitoring Requirements

- 6.2.1. For the purposes of demonstrating compliance with the maximum annual emission limits given in section 6.1.1., and the maximum operating hours given in section 6.1.2. j, the permittee shall:
 - a. <u>Install, calibrate, maintain and operate equipment to monitor the hours of operation of the engine</u> (1H).
 - <u>b.</u> <u>Monitor and record the monthly and rolling twelve-month total hours of operation for the engine (1H).</u>
- 6.2.2. The permittee is not required to submit an initial notification for the emergency generator engine (1H).

 The permittee is required to keep records of the operation of the engine (1H) in emergency and nonemergency service that are recorded through the non-resettable hour meter. The permittee must record
 the time of operation of the engine (1H) and the reason the engine was in operation during that time.

 [40 CFR§60,4214(b)]

6.3. Testing Requirements

<u>6.3.1.</u> No performance tests required.

6.4. Recordkeeping Requirements

- 6.4.1. The permitee shall keep the following records:
 - (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10 (b)(2)(xiv).
 - (2) Records of occurrence and duration of each malfunction of the engine or air pollution control and monitoring equipment.
 - (3) Records of performance tests and performance evaluations as required in §63.10 (b)(2)(viii).
 - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b) [see section 6.1.2.g in this permit], including corrective actions to restore malfunctioning process (engine) and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR§63.6655(a)]

- 6.4.2. The permittee must keep records required in Table 6 of this subpart to show continuouse compliance with each emission limitation (see section 6.1.2.a of this permit) that applies to you.

 [40 CFR§63.6655(d)]
- 6.4.3. The permittee must keep records of the maintenance conducted on the engine in order to demonstrate that you operated and maintained the engine according to your own maintenance plan.

 [40 CFR§63.6655(e)]
- 6.4.4. If you own an existing emergency stationary RICE that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[40 CFR§63.6655(f)]

6.5. Reporting Requirements

7.0. Source-Specific Requirements

[Hatchery: 1490 BHP Diesel-fired Emergency Generator Engine (2H; 2HE)]

7.1. Limitations and Standards

<u>7.1.1.</u> Emissions from the engine shall not exceed the maximum hourly and annual emission rates specified below:

Dellutent	Maximum Emission Rate			
<u>Pollutant</u>	<u>(lb/hr)</u>	(tpy) (1)		
<u>CO</u>	<u>9.91</u>	<u>2,48</u>		
<u>NOx</u>	<u>46.00</u>	<u>11.50</u>		
<u>PM</u> ₁₀	<u>3,23</u>	<u>0.81</u>		
SO ₂	<u>3.03</u>	<u>0.76</u>		
<u>VOC</u>	<u>3.76</u>	<u>0.94</u>		

⁽¹⁾ Annual emission rate based on 500 hr/yr of operation.

7.1.2. 60 CFR 60, Subpart IIII Requirements. The following conditions and requirements apply to the engine:

- a. The engine manufacturer must certify that their engine meets the emissions standards for nonroad CI engines in 40 CFR 89.112 and CFR 89.113 for all pollutants for the engine's model year and maximum engine power. [40 CFR §60.4202(a)(2)]
- b. The engine must be fueled with diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [40 CFR §60.4207(b)]
- c. The engine shall be equipped with a non-resettable hour meter. [40 CFR\$60,4209(a)]
- d. The permittee shall maintain the engine according to the manufacturer's emission-related written instructions. [40 CFR §60.4211(a)(1)]
- e. The permittee shall only change those emission-related settings of the engine that are permitted by the manufacturer. [40 CFR §60.4211(a)(2)]
- <u>f.</u> The permittee shall operate the engine according to the requirements listed below:
 - (1) There is no time limit on the use of the above engine in emergency situations.
 - (2) The permittee may operate the above engine for any combination of purposes specified below for a maximum of 100 hours per calendar year.
 - (i) The above engine may be operated for maintenance checks and readiness testing provided that the tests are recommended by federal, state or local government or the manufacturer. The permittee may petition the Administrator for approval of additional

hours to be used for maintenance checks or readiness testing, but a petition is not required if the permittee maintains records indicating the federal, state or local standards require maintenance and testing of the above engine beyond 100 hours per calendar year.

(3) The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (2) of this section. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR§60.4211(f)]

- g. If the permittee does not install, configure, operate, and maintain the emergency generator engine according to the manufacturer's emission-related written instructions, or if the permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - (3) The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission related written instructions, or within 1 year after the permittee changes the emission-related settings in a way that is not permitted by the manufacturer. The permittee must conduct subsequent performance testing every 8,750 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR§60.4211(g)]

7.2. Monitoring Requirements

- 7.2.1. For the purposes of demonstrating compliance with the maximum annual emission limits given in section 7.1.1., and the maximum operating hours given in section 7.1.2. f (1) &(2), the permittee shall:
 - a. <u>Install, calibrate, maintain and operate equipment to monitor the hours of operation of the engine.</u>
 - <u>b.</u> <u>Monitor and record the monthly and rolling twelve-month total hours of operation for the engine.</u>
- 7.2.2. The permittee is not required to submit an initial notification for the engine. The permittee is required to keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine (2H) and the reason the engine was in operation during that time.

 [40 CFR§60.4214(b)]

7.3. Testing Requirements

7.3.1. The permittee of the engine who conducts performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

[40 CFR§60.4212]

7.4. Recordkeeping Requirements

- 7.4.4. The permittee shall maintain the following records in accordance with section 7.1.2.b. of this permit:
 - a. The name of the diesel supplier;
 - <u>b.</u> A statement from the diesel supplier that the fuel complies with the specification under the definition of distillate oil in 40CFR§60.4.1c; and
 - <u>c.</u> <u>Sulfur content or maximum sulfur content of the diesel supplied.</u>

7.5. Reporting Requirements

8.0. Source-Specific Requirements

[Hatchery: Nat. Gas-fired Hot Water Boiler (3H) & Nat. Gas-fired Comfort Heating Units (4H)]

8.1. Limitations and Standards

- 8.1.1. The Hot Water Boiler (3H; 3HE) and the Comfort Heating Units (4H; 4HE) shall demonstrate compliance with the ten (10) percent opacity limit given in 8.1.4. of this permit by burning only pipeline quality natural gas.
- 8.1.2. As the annual emission limits given in Table 8.1.3 for the Hot Water Boiler (3H; 3HE) and the Comfort Heating Units (4H; 4HE) are based on operating 8,760 hr/yr at maximum design heat input capacities of 1.68 mm Btu/hr and 11.29 mm Btu/hr, respectively, there are no limits on the annual hours of operation or fuel usage for these sources.
- 8.1.3. The maximum emissions from the Hot Water Boiler (3H; 3HE) and the Comfort Heating Units (4H; 4HE) shall not exceed the limits given in the following table:

	Maximum Emission Rates				
<u>Pollutant</u>	Hot Water Boiler (3H; 3HE)		Comfort Heating Units (4H; 4HE)		
	<u>(lb/hr)</u>	(ton/yr)	<u>(lb/hr)</u>	(ton/yr)	
<u>PM</u>	<u>0.01</u>	<u>0.06</u>	<u>0.09</u>	<u>0.38</u>	
<u>NOx</u>	<u>0.17</u>	<u>0.74</u>	<u>1.13</u>	<u>4.95</u>	
<u>CO</u>	<u>0.14</u>	<u>0.62</u>	<u>0.95</u>	<u>4.16</u>	
<u>SO2</u>	=	=	<u>0.01</u>	<u>0.03</u>	
<u>VOC</u>	<u>0.01</u>	<u>0.04</u>	<u>0.06</u>	<u>0.27</u>	

8.1.4. 45CSR2

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1]

8.2. Monitoring Requirements

[Reserved]

8.3. Testing Requirements

[Reserved]

8.4. Recordkeeping Requirements

[Reserved]

8.5. Reporting Requirements

<u>9.0.</u> **Source-Specific Requirements**

[Truck Shop: Used Oil Heaters (1TS; 1TSE) and (2TS; 2TSE)]

9.1. Limitations and Standards

- Only used oil generated from fleet vehicle maintenance activities performed at the Truck Shop shall <u>9.1.1.</u> be burned in the two (2) Used Oil Heaters.
- The permittee must meet all applicable requirements of 40 CFR 279 Standards for the Management 9.1.2. of Used Oil, in particular Subpart C-Standards for Used Oil Generators, Section 23 - On-site Burning in Space Heaters, which states:

Generators may burn used oil in used oil-fired space heaters provided that:

- The heater burns only used oil that the owner or operator generated.
- The heater is designed to have a maximum capacity of not more than 0.5 million Btu per
- The combustion gases from the heater are vented to the ambient air.

[40 CFR§ 279.23]

- <u>9.1.3.</u> As the annual emission limits given in Table 9.1.3 for the two (2) Used Oil Heaters are based on operating 8,760 hr/yr at the maximum design heat input capacities of 0.50 mm Btu/hr for Used Oil Heater (1TS; 1TSE) and 0.25 mm Btu/hr for Used Oil Heater (2TS; 2TSE)], there are no limitations on the annual hours of operation or fuel usage for either of the heaters.
- Emissions from the two (2) Used Oil Heaters shall not exceed the maximum emission rates given in <u>9.1.4.</u> the following table:

	Maximum Emission Rates				
<u>Pollutant</u>	Used Oil Heater 0.5 mm Btu/hr (1TS; 1TSE)		Used Oil Heater 0.25 mmBtu/hr (2TS; 2TSE)		
	<u>(lb/hr) ⁽¹⁾</u>	(ton/yr) (3)	<u>(lb/hr) (2)</u>	(ton/yr) (3)	
<u>PM</u>	<u>0.10</u>	<u>0.44</u>	<u>0.05</u>	<u>0.23</u>	
<u>NOx</u>	0.05	<u>0.23</u>	<u>0.03</u>	<u>0.12</u>	
<u>CO</u>	<u>0.01</u>	<u>0.03</u>	<u>000</u>	<u>0.02</u>	
<u>SO2</u>	<u>0.09</u>	<u>0.39</u>	0.05	<u>0.20</u>	
<u>VOC</u>	<u>0.00</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	

- (1) Based on burning 3.30 gal/hr of used oil at a Btu value of 0.14 mm Btu/hr.
- (2) Based on burning 1.70 gal/hr of used oil at a Btu value of 0.14 mm Btu/hr.
- (3) Based on operating 8,760 hr/yr.

9.1.5. 45CSR2

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1]

9.2. Monitoring Requirements

[Reserved]

9.3. Testing Requirements

[Reserved]

9.4. Recordkeeping Requirements

[Reserved]

9.5. Reporting Requirements

APPENDIX A EXAMPLE FORM

Opacity Record
Pilgrim's Pride; Moorefield Facility

Plant ID No. 031-00005; Permit No. R13-1506BD

Date of Observation:
Data Entered by:
Reviewed by:
Date Reviewed:
Describe the General Weather Conditions:

Stack ID/ Vent ID/ Emission Poinit ID	Stack ID/ Vent ID/ Emission Poinit ID Description	Time of Observation	Visible Emissions? Yes/No	Months / Weeks of Visual Emissions (circle time period that applies for this column!)	

CERTIFICATION OF DATA ACCURACY

information contained in the attac	hed	, representing the period
beginning	and ending	, and any supporting
documents appended hereto, is tru	e, accurate, and complete.	
Signature ¹ (please use blue ink) Responsible Official or Authori	zed Representative	Date
Name and Title (please print or type) Name		Title
Telephone No	Fax No.	

- This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:
 - a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
 - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
 - c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
 - d. The designated representative delegated with such authority and approved in advance by the Director.

Attachment 3

Permit R13-1506D Prilgrim's Pride Corporation Moorefield, WV Poultry Feed Mill, Hatchery and Truck Stop

Calculation Section

Pollutant	Hatchery Emergency Generator Engines						
	Existing 750 BHP		New 1,490 BHP		Total (Existing + New)		
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	
PM	3.23	0.81	1.63	0.41	4.86	1.22	
PM ₁₀	3.23	0.81	1.63	0.41	4.86	1.22	
PM _{2.5}	3.23	0.81	1.63	0.41	4.86	1.22	
NOx	46.00	11.50	23.15	5.79	69.15	17.29	
CO	9.91	2.48	4.99	1.25	14.90	3.73	
SO ₂	3.03	0.76	1.52	0.38	4.55	1.14	
VOC	3.76	0.94	1.89	0.47	5.65	1.41	

Pollutant	Hatchery Hot Water Boiler and 31 Comfort Heating Units							
	Hot Water Boiler (1.68 mm Btu/hr)		31 Comfort Heating Units (11.294 mm Btu/hr)		Total (Boiler + Heating Units)			
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)		
PM	0.013	0.56	0.09	0.38	0.10	0.94		
PM ₁₀	0.013	0.56	0.09	0.38	0.10	0.94		
PM _{2.5}	0.013	0.56	0.09	0.38	0.10	0.94		
NOx	0.17	0.74	1.13	4.95	1.30	5.69		
CO	0.14	0.62	0.95	4.16	1.09	4.78		
SO ₂	0.00	0.00	0.01	0.03	0.01	0.03		
VOC	0.01	0.04	0.06	0.27	0.07	0.31		

Pollutant	Truck Shop Used Oil Heaters							
	Used Oil Heater (0.5 mm Btu/hr)		Used Oil Heater (0.25 mm Btu/hr)		Total Used Oil Heaters [(0.5 +0.25) mm Btu/hr]			
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)		
PM	0.10	0.44	0.05	0.24	0.15	0.68		
PM ₁₀	0.09	0.38	0.05	0.20	0.14	0.58		
PM _{2.5}	0.09	0.38	0.05	0.20	0.14	0.58		
NOx	0.05	0.23	0.03	0.12	0.08	0.35		
СО	0.01	0.03	0.00	0.02	0.01	0.05		
SO ₂	0.09	0.39	0.05	0.20	0.14	0.59		
VOC	0.00	0.01	0.00	0.01	0.00	0.02		

Pollutant	Hatchery and Truck Shop								
	Hatchery				Truck Shop		Total		
	Emergency Generator Engines Total (Existing + New)		Boiler + 31 Comfort Heating Units		Total Used Oil Heaters [(0.5 +0.25) mm Btu/hr]				
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	
PM	4.86	1.22	0.10	0.94	0.15	0.68	5.11	2.84	
PM ₁₀	4.86	1.22	0.10	0.94	0.14	0.58	5.1	2.74	
PM _{2.5}	4.86	1.22	0.10	0.94	0.14	0.58	5.1	2.74	
NOx	69.15	17.29	1.30	5.69	0.08	0.35	70.53	23.33	
СО	14.90	3.73	1.09	4.78	0.01	0.05	16.00	8.56	
\$O₂	4.55	1.14	0.01	0.03	0.14	0.59	4.70	1.76	
voc	5.65	1.41	0.07	0.31	0.00	0.02	5.72	1.74	